## FIRST AID AND EMERGENCY CARE

An emergency can happen at any time or at any place. An emergency is a situation demanding immediate action. The goal of this section is to introduce you to the basics of First Aid and Emergency Care that will help you recognize and respond to any emergency appropriately. Your response may help save a life.

## **EMERGENCY MEDICAL SERVICES**

The emergency medical services (EMS) system is a chain made up of several links. Each link depends on the other for success. When the EMS system works correctly, a victim moves through each link in the chain, beginning with the actions of a responsible citizen and ending with care being provided to attempt to restore the victim to health.

As a citizen responder, you are the first and most crucial link in the EMS system. In an ideal world, everyone would know first aid, but even if not trained in first aid, the citizen responder can provide critical help in any emergency. The citizen responder must first recognize that the illness or injury that has occurred is an emergency. He or she must then activate the EMS system, either by dialing9-1-1 or a local emergency number, by notifying a bystander or a nearby first responder, such as a police officer. The sooner someone activates the EMS system, the sooner more advanced medical help arrives, increasing the victim's chance of survival and recovery.

The second link in the EMS system is the dispatcher who works in an emergency communications center. The dispatcher receives the call and quickly determines what help is needed. He or she then dispatches the appropriate professionals. Some dispatchers are trained to give the caller instructions about how to help until EMS personnel arrive.

The first responder is the third link the EMS system. The first responder is usually the first person to arrive on the scene that is trained to provide a higher level of care. First responders are often the first people you turn to for help at the scene of an emergency. They may be fire fighters, law enforcement officers, lifeguards, or people with similar responsibility for the safety or well-being of the community. Due to the nature of their jobs, they are often close to the scene and have the necessary supplies and equipment to provide care. First responders provide a critical transition between a citizen responder's basic level of care and the care provided by more advanced EMS professionals.

The emergency medical technician (EMT) is the fourth link in the EMS system. Depending on the level of training and certification, the EMT is capable of providing more advanced emergency care and life-support techniques. In most of the United States, ambulance personnel are certified at least at the EMT-Basic level. EMT-Paramedics are highly specialized EMTs. In addition to performing basic life-support skills, paramedics can administer medications and intravenous fluids, provide advanced airway care, and perform other advanced life-saving techniques. They are trained to handle a wider range of conditions. Paramedics function at the highest level of out-of-hospital care. At the scene of the emergency, they serve as the "eyes and ears" of the hospital emergency physician through direct phone or radio contact.

The first four links of the EMS system provides victims of injury or sudden illness the best possible outof-hospital medical care. The fifth link of the EMS system, which is the hospital care providers, begins once the victim arrives at the hospital or other medical facility and the emergency department staff takes over care. Many different professionals, including emergency physicians, nurses, and other health care professionals, then become as involved as needed.

The sixth and final link of the EMS system is rehabilitation. The goal of rehabilitation is to return the victim to his or her previous state of health. After the victim has been moved from the emergency department, other health care professionals work together to treat and rehabilitate the victim. These professionals include family physicians, consulting specialist, social workers, and physical therapists.

The six parts of the EMS system are linked together like a chain - a chain of survival for the victim. The stronger the chain, the better the chance that a victim of injury or sudden illness will be returned to his or her previous state of health. All the links should connect to provide the best possible care to victims of injury or sudden illness.

## YOUR ROLE IN THE EMS SYSTEM

Once you have recognized that an emergency has occurred and have decided to act, calling EMS professionals is the most important action you and other citizen responders can take. Early arrival of EMS personnel increases the victim's chances of surviving a life-threatening emergency. Without the involvement of citizen responders, the EMS system cannot function effectively. A citizen responder trained in first aid can give help in the first few minutes of an emergency that can save a life or make the difference between complete recovery and permanent disability. Your role in the EMS system includes:

- 1. Recognizing that an emergency exists.
- 2. Deciding to act.
- 3. Calling EMS professionals
- 4. Providing first aid until help arrives (if you are trained in first aid).

<u>Recognizing emergencies</u>: Recognizing an emergency is the first step in responding. You may become aware of an emergency from certain indicators. The following table describes some emergency indicators and their signals.

<b>Emergency Indicators</b>	Signals
Unusual noises	Screams, yells, moans, or calls for help; breaking glass, crashing metal, screeching tires; abrupt or loud unidentifiable sounds, silence.
Unusual sights	Things that look out of the ordinary - a stalled vehicle, an overturned pot, a spilled medicine container, broken glass, downed electrical wires.
Unusual odors	Odors that are stronger than usual; unrecognizable odors, nauseous smells, natural gas odors.
Unusual appearance or behavior	Unconsciousness; difficulty breathing; clutching the chest or throat; slurred, confused, or hesitant speech; unexplainable confusion or drowsiness; sweating for no apparent reason; uncharacteristic skin color, dilated pupils.

<u>Deciding to act;</u> You have already learned that citizen involvement is crucial in an emergency situation. Every year, countless people recognize and respond to emergencies. Some phone for help,

some comfort the victim or family members, some give first aid to victims, and others help keep order at the emergency scene. People can help in many ways. In order to help, you must act.

Sometimes people simply do not recognize that an emergency has occurred. At other times, people recognize an emergency but are reluctant to act. People have various personal reasons for hesitating or not acting. The following are barriers to action; common reasons people give for not taking action.

- The presence of bystanders
- Uncertainty about the victim
- The nature of the injury or illness
- Fear of disease transmission
- Fear of not knowing what to do or of doing something wrong

Thinking about these things now and mentally preparing yourself will help you to respond more confidently in an actual emergency.

<u>Calling EMS professionals</u>; In an emergency situation, you may have several options. If you are alone, tell the victim that you are going to get help. You will help the victim more by getting help than keeping the victim company. If there are several people at the emergency scene, instruct an adult to call9-1-1 and then report back to you. Some people may panic during an emergency and not follow through with instructions. By telling the adult to report back to you, this guarantees that you know whether or not the EMS system has been activated.

<u>Providing first aid until help arrives;</u> This step should be taken only if you are trained in first aid. If you are not, try to keep the victim calm until EMS professionals arrive. Under no circumstance, should the victim ever be moved. Because you are unaware of the victim's injuries, as some may be internal and not visible, you should never attempt to move or adjust the victim; leave this to the professionals.

## **TAKING ACTION**

An emergency scene can be overwhelming, terrifying, and at the least, confusing. It poses questions that demand immediate answers- *What should I do first? Where can I get help? What can I do to help the ill or injured person?* Remembering and following three basic steps will help ensure you respond to any emergency effectively.

The emergency action steps are the three basic steps you should take in any emergency. These steps include:

- Check the scene and the victim
- *Call* 9-1-1 or the local emergency number
- *Care* for the victim

<u>Check the scene and the victim</u>; The *Check* step has two parts- checking the scene and checking the victim. Do not skip over checking the scene in your rush to get to the ill or injured person, or you may also become a victim.

*Checking the Scene*: Before you can help the victim, you must make sure the scene is safe for you and any bystanders. Take time to check the scene and answer these questions:

- 1. Is the scene safe?
- 2. What happened?
- 3. How many victims are there?
- 4. Are bystanders available to help?

Look for anything that may threaten your safety and that of the victim and bystanders. Examples of dangers are downed power lines, falling rocks, traffic, a crime scene, a hostile crowd, violent behaviors, fire, smoke, dangerous fumes, extreme weather, and deep or swiftly moving water. If any of these dangers are threatening, do not approach the victim. Retreat and call 9-1-1 or the local emergency number immediately. Do not risk becoming a second victim and creating more work for EMS professionals. Leave dangerous situations to professionals, such as fire fighters and police officers, who have the training to deal with them.

Determine what happened. Look around the scene for clues as to what caused the emergency and the type and extent of the victim's injuries. You may discover a situation that requires your immediate attention. As you approach the victim, take in the whole picture. Nearby objects, such as shattered glass, a fallen ladder, or a spilled bottle of medicine, might tell you what happened.

When you check the scene, look carefully for more than one victim. You may not spot everyone at first. For example, in a car crash, an open door may be a clue that victim has left the car or was thrown from it. If one victim is bleeding or screaming loudly, you may overlook another victim who is unconscious. It is also easy in any emergency situation to overlook an infant or a small child. Ask anyone present how many people may be involved. Bystanders may be able to tell you what happened or help in other ways. A bystander who knows the victim may know whether he or she has any medical problems or allergies. If no bystanders are close by, shout for someone who can help you.

As you move closer to the victim, continue to check the scene to see if it is still safe. At this point, you may see other dangers that are not obvious to you from a distance. You may also see clues as to what has taken place or come across victims and bystanders you did not notice before.

Checking the victim: As a rule, do not move a victim, even in immediate danger, such as fire, flood, poisonous fumes, hazardous traffic patterns, or an unstable structure. In dangerous situations like these, a citizen responder who tries to help or move the victim could become a second victim. Check the victim not only for symptoms of illness or injury, but also for signs of other conditions. Scan the victim head-to-toe and look for medical alert bracelets, or other clues to a person's health, like a blood-sugar monitor a diabetic would carry with them, or medication.

If you find the victim has any immediately life-threatening conditions, you must call EMS personnel immediately or assign another adult to call. The four conditions considered immediately life threatening in an emergency situation are:

- Unconsciousness
- No breathing or difficulty breathing
- No pulse
- Severe bleeding

If, and only if, you are trained in first aid, identify yourself to the victim as a person trained in first aid. Try not to alarm the victim. Position yourself close to the victim's eye level, without moving him or her. Speak calmly and confidently. Identify yourself, explain that you have first aid training, and ask if you can help. Your words can reassure the victim that a caring and skilled person is offering help.

Next, if you are trained in first aid, get permission to provide care. Before giving first aid to a conscious adult victim, you must get the victim's permission to give care. This permission is referred to as consent. A conscious victim has the right to either refuse or accept care. To get consent you must tell the victim:

- Who you are
- Your level of training
- What it is you would like to do

Only then can a conscious victim give you consent. Do not give care to a conscious victim who refuses it. If the conscious victim is an infant or child, get permission to provide care from the supervising adult, if possible.

If the victim is unconscious or unable to respond because of the illness or injury, consent is implied. Consent is also implied for an infant or child if a supervising adult is not present or immediately available.

<u>Call EMS Personnel</u>; Your top priority as a citizen responder is to get professional help to the victim as soon as possible. The EMS system works more effectively if you can give information about the victim's condition when the call is placed. This information helps to ensure that the victim receives proper medical care as quickly as possible. By calling 9-1-1 or the local emergency number, you put into motion a response system that rushes the correct emergency care personnel to the victim.

When to call; At times, you may be unsure if EMS personnel are needed. For example, the victim may say not to call and ambulance because he or she is embarrassed about creating a scene. As a general rule, call EMS personnel for any of the following conditions:

- Unconsciousness or altered level of consciousness
- Breathing problems (no breathing or difficulty breathing)
- Persistent chest or abdominal pain or pressure
- No pulse
- Severe bleeding
- Severe burns
- Vomiting blood or passing blood in feces or urine
- Poisoning or suspected poisoning
- Seizures, severe headache, or slurred speech
- Injuries to the head, neck, or back
- Broken bones or suspected broken bones

Special situations also warrant calling EMS personnel for assistance. These include:

Fire or explosion

- The presence of poisonous gas
- Downed electrical wires
- Swiftly moving or rapidly rising water
- Motor vehicle collisions
- Victims who cannot move on their own

These conditions and situations make up by no means a complete list. It is beyond anyone's ability to provide a definitive list, since exceptions always exist. Trust your instincts, if you think there is an emergency, there probably is. Do not lose time calling untrained people, such as friends or family members. Call EMS personnel for professional medical help immediately. These professionals would rather respond to a non-emergency than arrive at an emergency too late to help.

Making the call; You may ask a bystander to call the emergency number for you. Tell him or her the victim's condition. For example, tell the bystander, "Call 9-1-1. Tell them the victim is not breathing, and report back to me." If you find that the victim is unconscious, do not delay calling EMS personnel. Unconsciousness is a sign of a serious injury or illness. Sending someone else to make the call will enable you to stay with the victim to check breathing and circulation and provided needed care if you are trained in first aid.

When you tell someone to call for help, you should do the following:

- 1. Give the caller the EMS telephone number. This number is 9-1-1 in many communities. Tell the caller to dial "0" (the operator) only if you do not know the emergency number in the area. Sometimes the emergency number is listed on pay phones and on the inside front cover of telephone directories.
- 2. Tell the caller to give the dispatcher the necessary information. Most dispatchers will ask:
  - 1. The exact address or location and the name of the city or town. By prepared to give the names of nearby intersecting streets (cross streets or roads), landmarks, the name of the building, the floor, and the room number.
  - 2. The telephone number from which the call is being made.
  - 3. The caller's name.
  - 4. What happened- for example, a motor vehicle collision, a fall, a fire, sudden onset of chest pain, etc.
  - 5. How many people are involved.
  - 6. The condition of the victim(s) for example, unconsciousness, chest pain, trouble breathing, bleeding.
  - 7. The help (care) being give, if applicable.
  - 8. Tell the caller not to hang up until the dispatcher hangs up. It is important to make sure the dispatcher has all the information needed to send the right help to the scene. The EMS dispatcher may also be able to give the caller instructions on how to best care for the victim until help arrives.
  - 9. Tell the caller to report to you after making the call and to inform you of what the dispatcher's response was.

If you are the only person on the scene, shout for help. If an adult victim is unconscious and nobody immediately arrives to assist, you will need to get professional help immediately. Find the nearest telephone as quickly as possible. Call EMS personnel and then return to the victim. Recheck the victim and give the necessary care, if you are trained in first aid.

If you shout for help but receive no response from other possible bystanders and you are able to give care to correct and urgent situation, such as applying a pressure bandage to control severe bleeding, you may consider completing that care before leaving to make the call, if you are trained in first aid. However, if the victim is unconscious, make the call at once.

What happens when you call EMS; When your call is answered you will talk to an emergency dispatcher who has had special training in dealing with crises over the phone. The dispatcher will ask you for your phone number and address and will ask you other key questions to determine whether you need police, fire, or medical assistance.

It may seem that the dispatcher asks a lot of questions. The information you give helps the dispatcher to send the type of help needed, based on the severity of the emergency. Once the ambulance is on its way, the dispatcher may stay on the line and continue to talk with you. Many dispatchers today are also trained to give instructions before EMS personnel arrive.

<u>Care for the Victim</u>; Once you have checked the scene and the victim, and have called for help, you may need to provide care. Always care for life-threatening conditions before those that are not life threatening. For example, a breathing emergency would take priority over an injured leg. While you are waiting for more advanced medical help, watch for changes in the victims breathing and consciousness. A change in the victim's level of consciousness (becoming less alert or awake) may be a sign of serious illness or injury. A condition that may not appear serious at first may become serious with time. Help the victim rest comfortably, without moving him or her, and keep him or her from getting chilled or overheated. Take time to reassure and calm the victim.

Emergency situations are often confusing and frightening. To take appropriate actions in any emergency, follow the three basic emergency action steps- *Check-Call-Care*. *Check* the scene and the victim. *Call* the local emergency number to activate the EMS system. Ask a conscious victim's permission to provide *care*. It is a good idea to get as many individuals as possible trained in first aid, as they will be better equipped to handle an emergency situation. At the very least, the directors and leaders of the activity should be trained in first aid and CPR.